

Appl. No. 10/620,715  
Amdt. dated October 27, 2006  
37 CFR 1.312 Amendment After Allowance - Second Supplement to Response C

RECEIVED  
CENTRAL FAX CENTER  
OCT 27 2006

**Amendments to the Claims**

Please amend claim 1 and cancel claim 3 as indicated below. The claim listing below replaces all previous listings.

Claim 1 (currently amended) A defect free semipermeable composite membrane having a burst pressure of 10 to 500 psi and a pure water permeability of 1-500 gfd/psi comprising:

- (i) a support layer which provides mechanical strength and is selected from the group consisting of extruded porous material, non woven material, woven material, braided material, knitted material, any other rigid or flexible organic or inorganic permeable material;
- (ii) a middle layer bonded to the support layer which covers the rough surface and defects of the support layer, said middle layer selected from the group consisting of an epoxy, a polyurethane, a silicone, and a combination thereof and provides binding between said support and said barrier layers; and
- (iii) a barrier layer which provides selective separation and coats the middle layer to provide a defect free membrane, said barrier layer consisting of 8-60% of at least one hydrophobic polymer, ~~1-20%~~ 1-40% of at least one hydrophilic polymer, 1-20% of an inorganic additive, ~~1-10% of a monomer, 1-10% of an organic additive, 1-~~ 20% percent other organic additive, and solvent,

wherein the middle layer provides binding between the support layer and the barrier layer.

Claim 2 (cancelled).

Claim 3 (cancelled).

Claim 4 (original) The membrane of claim 1, wherein said composite membrane is in the

Appl. No. 10/620,715  
Amdt. dated October 27, 2006  
37 CFR 1.312 Amendment After Allowance - Second Supplement to Response C

form of a hollow fiber.

Claim 5 (original) The membrane of claim 1, wherein said composite membrane is in the form of a tube.

Claim 6 (original) The membrane of claim 1, wherein said composite membrane is in the form of a sheet.

Claim 7 (original) The membrane of claim 1, wherein said composite membrane is in the form of a sphere.

Claim 8. Cancelled.

Claim 9. (previously presented) The membrane of claim 1, wherein said membrane has a burst pressure of about 35 to at least 100 psi, and a pure water permeability of about 20 to 150 gfd/psi at 10 psi transmembrane pressure.

Claims 10 - 16. Cancelled.